

US EPA ARCHIVE DOCUMENT

IN REPLY A-5-1
REFER TO: NSO 2

Mr. Joseph M. Tramma
Air Quality Analysis and Compliance Supervisor
South Coast Air Quality Management District
21685 Copley Drive
Diamond Bar, CA 91765

Dear Mr. Tramma:

EPA appreciates the opportunity to comment on your proposal to issue a Permit to Construct to the Mine Reclamation Corporation for the construction of two landfill gas flares to be located at the proposed Eagle Mountain Landfill in northeastern Riverside County, California. It is our understanding that, due to the District's inadvertent failure to notify the EPA of the draft permit, the permit will not be issued before our comments are considered, notwithstanding the fact that the public comment period has already ended.

EPA's primary concerns involve the application of BACT, the lack of available offsets for the project, the application of District regulations to only a portion of the proposed project, and the enforceability of some of the permit conditions. In addition, EPA believes that the project, as currently permitted by the SCAQMD, may be subject to review under the federal Prevention of Significant Deterioration (PSD) regulations.

EPA is aware that the SCAQMD is preparing a draft permit for the project's landfill gas collection system which may resolve some of our concerns. However, because these permits are being issued separately and the draft permit for the gas collection system has not yet been proposed, the attached comments address only the draft permit for the landfill gas flares. Our detailed comments on the draft permit are attached.

If you have any questions regarding these comments, please contact Bob Baker of our New Source Section at (415) 744-1258.

Sincerely,

Kenneth F. Bigos, Chief
Stationary Source Branch
Air & Toxics Division

Enclosures

cc: CARB
Judy Rocchio, NPS

EPA Comments
Mine Reclamation Corporation's
Eagle Mountain Landfill and Recycling Center

1. The SCAQMD permit is proposing to control only the emissions from the two landfill gas flares in Phase I of the project. By permitting only Phase I of the project, the District is failing to limit the potential to emit of the other 3 project phases. Without federally enforceable limits on a source's emissions, EPA calculates a source's potential to emit by assuming the source is operating at maximum capacity with worst case (uncontrolled) emissions. Since the EPA also considers all phases of a project when calculating a source's potential to emit, EPA would combine the permitted emissions from Phase I with the uncontrolled emissions from the other three phases to determine the Eagle Mountain Landfill's potential to emit. As a result, Eagle Mountain would be deemed a major stationary source subject to PSD review and would be required to obtain a PSD permit from the EPA before it could commence construction. EPA recommends that the District revise the permit to include all phases of the project or, at the very least, include enforceable emission limits/rates that would apply to future permit units, effectively limiting total emissions from the project.
2. The SCAQMD permit only addressed emissions from the two flares in Phase I of the project. District regulations [Rule 1303(b) and (b)(4)] require the District to permit the total project, not just the flares in phase I. Rule 1303(b) requires the permit to address the net emission increase at a facility. Rule 1302(h) defines "facility" to include "...other air contaminant-emitting activities which are located on one or more contiguous properties..." Rule 1303(b)(4) requires a new major polluting facility to meet the requirements of 40 CFR 51 Subpart I - Review of New Sources and Modifications, which defines a source to include "...all pollutant-emitting activities...located on one or more contiguous or adjacent properties..." These regulations require the District to permit not just the emissions from the flares, but all emissions from the project, including fugitive emissions from the landfill operations. By not addressing emissions from the landfill, the District is ignoring the air quality impacts from hundreds if not thousands of tons per year of PM-10 and VOC emissions.
3. The SCAQMD permit proposes to control emissions from the landfill gas flares with automatic combustion air control and a ≤ 0.054 lbs/MMbtu emission rate for NO_x and a ≤ 0.27 lbs/MMbtu emission rate for CO, and assumes a gas collection efficiency of 55%. EPA believes that BACT as required by Rule 1303 should require a significantly higher gas collection efficiency (EPA is proposing 90% as LAER for another landfill), a 99% VOC destruction efficiency, and should consider the use of SCR or SNCR for control of NO_x emissions and a CO oxidizing catalyst for control of CO emissions.

4. The project proponent, MRC, has estimated the maximum landfill gas production rate for Phase I to be 10,452 cfm which, at 505 btu/cu.ft., results in a heat input rate of 314 MMbtu/hr. The District permit limits total gas flow and heat input to the flare station to no more than 5748 cfm and 174 MMbtu/hr. The District is, in effect, assuming a 55% landfill gas collection efficiency. If gas collection efficiency is assumed to be a more reasonable 80+ % (EPA's opinion), then emissions from the project will be significantly greater than are allowed by the District permit and will subject the project to PSD review (see Comment 1).
5. The permit requires continuous monitoring of landfill gas flow rate and BTU content and the flare temperature but does not require continuous monitoring of stack emissions. Considering the nature of the fuel, EPA recommends that the SCAQMD require installation of NOx and CO continuous monitors on the flare exhaust stacks.
6. The SCAQMD permit proposes to provide offsets for the project through the Priority Reserve. However, Rule 1309.1(i) limits the allocation from the Priority Reserve to 250 lbs/day for CO. The Eagle Mountain project's allowable CO emissions from Phase I alone are 1,128 lbs/day. Offsetting these emissions from the Priority Reserve would appear to be a violation of Rule 1309.1. Construction of this project without adequate offsets would be a violation of Rules 1303(b)(2) and (b)(4).
7. Permit Enforceability Issues:
 - a. Permit Condition 15 requires continuous monitoring of landfill gas BTU content. EPA is concerned that an instrument capable of continuously monitoring BTU content may not be available.
 - b. Permit Condition 25 requires an annual source test for most pollutants but does not require a test for landfill gas BTU content. Conditions 25 and 26 limit NOx and CO emissions to 0.054 and 0.27 lbs/MMbtu respectively. Without a test for BTU content these emission limits are unenforceable. EPA recommends that the permit require testing for landfill gas BTU content as part of the annual source test.
 - c. Permit Conditions 23 and 24 contain lbs/hr and lbs/day emission limits for emissions from each flare and from the flare station. However, because of the long averaging time, a lbs/day emission limit cannot be enforced from an annual source test. In order to enforce lbs/day emission limits, the permit must require continuous monitoring of the regulated pollutant (see our comment #5 above).

- d. Permit Condition 27 limits particulate emissions to 12.1 lbs per million cu. ft. of inlet gas. In order to enforce this limit the inlet gas flow rates for both flares and the particulate concentrations in both flare exhausts will all have to be measured simultaneously. EPA recommends that this limit be changed to a lbs/MMbtu limit with BTU testing during the source test.
8. Although not strictly a permit issue, the risk assessment prepared by the Mine Recovery Corp., as required by District Rule 1401, addressed only the health impacts resulting from the emissions of air toxics from the two flares in Phase I of the project. The assessment assumed 98% destruction of air toxics in the landfill gas by the flares. However, the assessment did not address health impacts from the emissions from the other 3 phases of the project nor did it include the unabated air toxics in the fugitive VOC emissions from the landfill itself. As a result, the risk assessment did not include the health impacts of possibly hundreds of tons of air toxics per year from the project.